

Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, D.C. 20554

In the Matter of	)	
	)	
Service Rules for the 698-746, 747-762 and 777-792 MHz Bands	)	WT Docket No. 06-150
	)	
Revision of the Commission's Rules to Ensure Compatibility With Enhanced 911 Emergency Calling Systems	)	CC Docket No. 94-102
	)	
Section 68.4(a) of the Commission's Rules Governing Hearing-Aid Compatible Telephones	)	WT Docket No. 01-309
	)	
Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services	)	WT Docket No. 03-264
	)	
Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission's Rules	)	WT Docket No. 06-169
	)	
Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band	)	PS Docket No. 06-229
	)	
Development of Operational, Technical and Spectrum Requirements for Meeting federal, State and Local Public Safety Requirements Through the year 2010	)	WT Docket No. 96-86
	)	

## REPLY COMMENTS OF LEAP WIRELESS INTERNATIONAL, INC.

Leap Wireless International, Inc., on behalf of itself and its affiliated companies (“Leap”) hereby offers the following Reply Comments in connection with the Further Notice of Proposed Rulemaking (“Further Notice”) issued in the above-captioned proceedings.

### **I. THERE IS A BROAD CONSENSUS FAVORING UPPER 700 MHZ BAND PLANS THAT WILL PROVIDE OPPORTUNITIES FOR REGIONAL, SMALL AND RURAL CARRIERS TO ACQUIRE 700 MHZ SPECTRUM**

There is a strong consensus<sup>1</sup> that Proposals 2 and 5 in the *Further Notice* set forth band plans that will promote opportunity for carriers of *all* sizes in the auction Upper 700 MHz spectrum blocks. For this reason, the Commission should adopt one of these proposals.<sup>2</sup> The balanced mix of license sizes represented in these band plans will continue to facilitate large carrier participation in the auction, but will also preserve the diversity and innovation at 700 MHz that small, regional and rural carriers, as well as new entrants, bring to the CMRS marketplace generally – including service to underserved populations that the supercarriers tend to ignore.<sup>3</sup>

There is no need for the Commission to adopt a band plan – such as Proposal 3,

---

<sup>1</sup> See, e.g., Comments of MetroPCS Communications, Inc. (May 23, 2007) at 13-20; Comments of Rural Telecommunications Group, Inc. at 5-8; Comments of SpectrumCo LLC (May 23, 2007) at 8-16; Comments of United States Cellular Corporation (May 23, 2007) at 4-9.

<sup>2</sup> *Id.* at ¶¶ 192-193, Figure 7, 204-206 and Figure 10.

<sup>3</sup> As Leap set forth in its initial Comments to the *Further Notice*, If the Commission proceeds with Proposal 5, the D Block should be licensed on a REAG basis, and the C block should be assigned on an EA basis. Licensing the paired 5.5 MHz C blocks on an EA basis will make it easier for these licensees to manage cross-border interference issues with an extra 0.5 MHz that can be used as a guard band.

which features REAG licenses and a 22 MHz D-Block – that will virtually guarantee that small, regional, rural and new carriers will be frozen out of the auction.

## **II. THERE HAS BEEN NO PERSUASIVE EVIDENCE OR REASONS PROFFERED FOR THE COMMISSION TO DEVIATE FROM ITS “SUBSTANTIAL SERVICE” PERFORMANCE REQUIREMENTS**

The record in this proceeding does not support altering the current 700 MHz band performance requirement of demonstrating “substantial service” at the end of the license term.<sup>4</sup> The substantial service standard has been adopted with success in a number of other wireless services,<sup>5</sup> and less than three years ago, the Commission expressly rejected a return to geographic- or population-based construction requirements or benchmarks as conflicting with its “market-oriented policies.”<sup>6</sup> There simply has been no persuasive evidence presented by any party in this proceeding of adverse developments with respect to rural wireless service that warrant the Commission’s turning 180-degrees from its current policy on wireless buildout requirements.

RTG, the chief advocate of a geography-based “use it or lose it” approach

---

<sup>4</sup> See 47 C.F.R. § 27.14(a); *Notice* at ¶ 16.

<sup>5</sup> See, e.g., *Rural NPRM*, 18 FCC Rcd 20802, 20819 ¶ 34 (“In more recently adopted rules for wireless services, such as our Part 27 rules for private services, Lower and Upper 700 MHz, 39 GHz, and 24 GHz, the Commission established the substantial service standard as the only construction requirement.”). See also Coalition Proposal at 44. (“There is ample precedent for [a substantial service] approach as the Commission has adopted this very same requirement for operation at 2.3 GHz, the Upper 700 MHz band, the Lower 700 MHz band, the paired 1392-1395 MHz and 1432-1435 MHz bands or the unpaired 1390-1392 MHz, 1670-1675 MHz and 2385-2390 MHz bands.”).

<sup>6</sup> *Rural Order*, 19 FCC Rcd 19078, 19122 (2004).

similar to the old and cumbersome cellular unserved area rules, provides much detail on the complex workings of its proposed rule change,<sup>7</sup> but provides *no* data to support why the approach is needed. In fact, as CTIA observes, the Commission's most recent findings regarding CMRS retail competition undercut such a rigid buildout approach, as the Commission has acknowledged that wireless carriers are aggressively expanding their networks, including into rural areas.<sup>8</sup> Leap agrees with CTIA's observation that, in proposing a geographic buildout rule, the *Further Notice* fails to explain a reversal of policy that "completely ignores all arguments and evidence already in WT Docket No. 06-150 opposing geographic buildout policy."<sup>9</sup>

A geography-based buildout requirement threatens to impose enormous costs on the wireless industry that are wholly unnecessary<sup>10</sup> and, in the end, anti-consumer – diverting "network resources from where users demand service to where regulators prefer to deploy them."<sup>11</sup> Thus, the substantial service requirement

---

<sup>7</sup> See Comments of The Rural Telecommunications Group, Inc. (May 23, 2007), at 11 and n.17.

<sup>8</sup> Comments of CTIA – The Wireless Association (May 23, 2007), at 5 (citing Implementation of Section 6002(b) of the Omnibus Reconciliation Act of 1993, Eleventh Report, 21 FCC Rcd 10947, 10982 (2006) (average number of 3.6 competing carriers in rural areas)).

<sup>9</sup> *Id.* at 4 (footnote omitted). See also Letter from John T. Scott, Verizon Wireless, to Marlene H. Dortch, FCC, WT Docket No. 06-150 (Apr. 4, 2007).

<sup>10</sup> Verizon Wireless forecasts added costs of between approximately \$1.3 billion and \$2.4 billion per national 700 MHz network under the *Further Notice's* proposed geographic service approach. See Thomas W. Hazlett, "Regulatory Policy at 700 MHz: Competition, Auction Receipts, and Economic Welfare" (May 23, 2007), at 6 and n.12, *attached to* Comments of Verizon Wireless (May 23, 2007) ("Hazlett").

<sup>11</sup> *Id.* at 7.

should be retained.

If, however, the Commission for some reason does feel the need to retrench on its policy with respect to wireless performance requirements – and Leap again strongly urges the Commission not to do so – it should go no further than a population-based construction benchmark similar to those set forth in the Commission’s PCS rules. The PCS construction requirements were tailored to a mix of spectrum block and geographies sizes roughly approximating those proposed with respect to the 700 MHz band. They are well understood in the marketplace, and have been successful in backstopping the natural incentives of carriers to build out licenses for which they have paid many millions of dollars at auction.<sup>12</sup> Thus for example, the Commission could implement a rule at 700 MHz similar to the PCS construction requirement governing 10 and 15 MHz licenses.<sup>13</sup> Under this approach, a 700 MHz licensee would need to serve with a signal level sufficient to provide adequate service to at least one-quarter of the population of the licensed area within five years of being licensed, or in the alternative make a substantial service showing.<sup>14</sup> While there may be other variations on this theme, the main point is that the Commission’s buildout rules should target persons with access to wireless networks, not artificial fixed geographic targets that will engender enormous costs

---

<sup>12</sup> As opposed to geography-based buildout rules, a population-based approach at least grants the licensee a large degree of discretion in constructing its network while avoiding the major pitfall of “sabotage[ing] the productive investments that create valuable wireless networks.” *Id.* at 4.

<sup>13</sup> *See* 47 C.F.R. § 24.203(b).

<sup>14</sup> *Id.*

with no consumer benefit.<sup>15</sup>

### **III. THERE IS A CONSENSUS THAT ANONYMOUS BIDDING WOULD BE VERY DAMAGING TO SMALL, RURAL AND REGIONAL BIDDERS**

Leap has consistently expressed its belief that transparency in the 700 MHz auction process is important for all bidders, but critical to the successful participation of small, rural and regional bidders and their financing sources by helping them make a variety of strategic decisions involving technology choices and license valuations. That proposition is strongly supported by the current record.<sup>16</sup>

The principal proponents of anonymous bidding are Verizon Wireless<sup>17</sup> and the Ad Hoc Public Interest Spectrum Coalition (AHPISC),<sup>18</sup> but for different reasons. Verizon's incentives in advocating this approach are obvious – as a major player whose actions during the auction provide very important strategic information to smaller bidders and new entrants,<sup>19</sup> Verizon has little reason to support a competitive auction that includes such participants. Furthermore, while AHPISC's proposal may be well intentioned, these agencies are not direct

---

<sup>15</sup> See *Hazlett* at 4-5.

<sup>16</sup> See, e.g., Comments of AT&T, Inc. (May 23, 2007) at 36-40; Comments of the Blooston Rural Carriers (May 23, 2007) at 9-10; Comments of Dobson Communications Corporation (May 23, 2007) at 7-9; Comments of MetroPCS Communications, Inc. (May 23, 2007) at 46-49; Comments of Rural Cellular Association (May 23, 2007) at 18; Comments of the Rural Telecommunications Group, Inc. (May 23, 2007) at 14-15; Comments of the 700 MHz Independents (May 23, 2007) at 11-12; Comments of United States Cellular Corporation (May 23, 2007) at 22-25.

<sup>17</sup> Comments of Verizon Wireless (May 23, 2007) at 36.

<sup>18</sup> Comments of AHPISC at 30-31.

<sup>19</sup> See, e.g., Comments of United States Cellular Corporation at 23-25 (cataloguing special needs of smaller bidders for bidder identity and interest information disclosures because of their “strategic dependencies’ and because they lack the more sophisticated market intelligence and analytical capabilities of larger bidders”).

marketplace participants who truly grasp a small carrier's need for auction information. To the extent that AHPISC relies on analyses by Dr. Gregory Rose of perceived patterns of retaliatory bidding and blocking strategies by incumbents, the record in this proceeding demonstrates those reports to be fundamentally flawed and wholly speculative.<sup>20</sup>

If the Commission continues to have lingering fears about the competitiveness of the 700 MHz auction, it should adopt an eligibility ratio approach consistent with the one adopted for Auction No. 66, but updated with the lessons learned from that process. In this regard, Leap agrees with U.S. Cellular that given the "serious disadvantages which information restrictions create for smaller bidders, the Commission should avoid setting an unnecessarily high ratio," and that "the success of Auction # 66 is evidence that the Commission was initially too conservative in setting this 3.0 trigger."<sup>21</sup> If the Commission retains an eligibility ratio approach, Leap agrees that a more realistic level of 2.5 would be appropriate.<sup>22</sup>

#### **IV. THE 700 MHZ AUCTION IS TOO IMPORTANT FOR THE FCC TO EXPERIMENT WITH AN UNTESTED COMBINATORIAL BIDDING METHODOLOGY**

The Commission appears to be advancing its thinking on the use of a combinatorial or "package" bidding methodology, as evidenced by its release of a

---

<sup>20</sup> See, e.g., Comments of AT&T Inc. (May 23, 2007) at 37-40; Comments of MetroPCS Communications, Inc. (May 23, 2007) at 48-49; Comments of SpectrumCo LLC (May 23, 2007) at 18.

<sup>21</sup> Comments of United States Cellular Corporation (May 23, 2007) at 22.

<sup>22</sup> *Id.*

recent study examining the performance properties of two specific designs for simultaneous multiple round auctions with package bidding.<sup>23</sup> Leap believes that such research is commendable, but reiterates that it would be exceedingly unwise for the Commission to experiment with package bidding in the 700 MHz auctions.

The Commission simply has not demonstrated a package bidding methodology that is “ready for prime time” for auctions as large and important as those upcoming at 700 MHz. On this point, Leap underscores Verizon’s observation that there are “many unanswered questions about the specifics of combinatorial bidding and the Commission’s ability to implement combinatorial bidding,” and agrees that the downside risks of adopting the hybrid SMR-package bidding auction only vaguely described in the *Further Notice* “are far too great to experiment with combinatorial bidding at this time.”<sup>24</sup>

Verizon’s expert, Karen Wrege, one of the original implementers of FCC spectrum auctions, has concluded that it is neither “feasible [n]or wise for the FCC to proceed with combinatorial bidding for this auction.”<sup>25</sup> Ms. Wrege recommends that the agency should “auction the available frequencies using the tried-and-true” SMR methodology.<sup>26</sup> Leap strongly urges the Commission to heed this

---

<sup>23</sup> "An Experimental Comparison of Flexible and Tiered Package Bidding," Prepared for the Wireless Telecommunications Bureau of the Federal Communications Commission by Jacob K. Goeree, Charles A. Holt, and John O. Ledyard, *Final Report* (May 25, 2007) ("Package Bidding Study").

<sup>24</sup> Comments of Verizon Wireless (May 23, 2007) at 42-43.

<sup>25</sup> *Id.*, Attachment B, Declaration of Karen M. Wrege (May 23, 2007), at 5.

<sup>26</sup> *Id.* at 1. *See also Ex Parte* “Statement of Robert J. Weber, the Frederic E. Nemmers Distinguished Professor of Decision Sciences at the Kellogg School of Management,

(continued...)



recommendation.

## **V. LEAP SUPPORTS A BROADBAND-ONLY DESIGNATION IN THE 700 MHZ PUBLIC SAFETY SPECTRUM**

Leap supports the Commission's tentative conclusion "to re-designate the public safety wideband spectrum for broadband use consistent with a nationwide interoperability standard, and to prohibit wideband operations on a going forward basis."<sup>27</sup> There is a strong consensus in the record regarding the need for the public safety community to deploy broadband technology, and Leap agrees that a broadband public safety designation would best serve the Commission's goal of "enabling first responders to protect safety of life, health and property."<sup>28</sup>

To that end, Leap agrees with Alcatel-Lucent that, in connection with the broadband re-designation, the Commission should reassess and optimize certain key technical rules for both public safety and commercial operations in the 700 MHz band.<sup>29</sup> Specifically, the Commission should adopt Alcatel-Lucent's recommendations that the agency (i) relax out-of-band emission ("OOBE") limits

---

(...continued)

Northwestern University," WT Docket No. 06-150 (Mar. 7, 2007) (filed on behalf of United States Cellular Corporation) ("substantial further development, public explanation, and discussion of details involved in implementing limited package bidding is required before the FCC should give any consideration to such dramatic change from the SMR format procedure that, to date, has served both the public interest and the industry quite well"); Comments of Aloha Partners (May 23, 2007) at 5-8 (demonstrating problems with combinatorial bidding, particularly for smaller bidders).

<sup>27</sup> *Further Notice* at ¶ 250.

<sup>28</sup> *Id.* at ¶ 253.

<sup>29</sup> *See* Comments of Alcatel-Lucent (May 23, 2007) at 19-21.

applicable to commercial emissions falling into the public safety block to OOB levels that are comparable to OOB rules applicable to adjacent commercial spectrum blocks (*e.g.*, the  $42+10\log P$  (in 100 kHz) OOB rule that applies in the commercial 850 MHz cellular band),<sup>30</sup> and (ii) adopt an OOB limit of  $76+10\log P$  for public safety broadband operations into narrowband operations.<sup>31</sup> Leap believes that such rules will create a better balance that both promotes and protects the operations of commercial and public safety broadband deployments at 700 MHz.

#### IV. CONCLUSION

Leap urges that the Commission's rules be amended as set forth above.

Respectfully submitted,

/s/

James H. Barker  
LATHAM & WATKINS LLP  
555 11<sup>TH</sup> Street, NW, Suite 1000  
Washington, DC 20004  
(202) 637-2200

Robert J. Irving, Jr.  
Senior Vice President and General Counsel  
Leap Wireless International, Inc.  
10307 Pacific Center Court  
San Diego, CA 92121

Counsel for Leap Wireless International, Inc.

June 4, 2007

---

<sup>30</sup> *Id.* at 20 (*citing Further Notice* at ¶ 258).

<sup>31</sup> *Id.*